

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:632132 CAPLUS  
DN 141:160851  
ED Entered STN: 06 Aug 2004  
TI Agents for simultaneous degreasing-and-chemical conversion and metals treated by the agents  
IN Matsukawa, Masahiko; Chihara, Hiroshi; Makino, Kazuhiro  
PA Nippon Paint Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 15 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C23C022-34  
ICS C23G001-02; C25D013-02  
CC 56-6 (Nonferrous Metals and Alloys)  
Section cross-reference(s): 46

FAN CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004218071	A2	20040805	JP 2003-403689	20031202 <--
PRAI	JP 2002-372771	A	20021224		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2004218071	ICM	C23C022-34
	ICS	C23G001-02; C25D013-02
JP 2004218071	FTERM	4K026/AA02; 4K026/AA07; 4K026/AA09; 4K026/AA11; 4K026/AA22; 4K026/BA01; 4K026/BA02; 4K026/BB07; 4K026/BB08; 4K026/BB10; 4K026/CA13; 4K026/CA18; 4K026/CA27; 4K026/CA28; 4K026/CA35; 4K026/CA37; 4K026/CA38; 4K026/DA02; 4K026/DA03; 4K026/DA06; 4K053/PA02; 4K053/PA08; 4K053/PA10; 4K053/PA13; 4K053/QA04; 4K053/RA14; 4K053/RA15; 4K053/RA16; 4K053/RA17; 4K053/RA25; 4K053/RA26; 4K053/RA27; 4K053/RA29; 4K053/RA46; 4K053/RA47; 4K053/RA64; 4K053/YA03

AB~ The agents contain at least Zr, Ti or/and Hf, F and nonionic surfactants which have HLB value of 9-17 at a content of 20-300,000 ppm. Metal surfaces treated by the agents have good bonding to coating and resistance to corrosion.

ST metal surface treatment chem conversion agent nonionic surfactant; zirconium titanium hafnium metal surface degreasing chem conversion

IT Bromates

Chlorites

Fluorides, uses

Nitro compounds

Perchlorates

Peroxides, uses

RL: CAT (Catalyst use); USES (Uses)

(accelerator; agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents)

IT Degreasing

Surface treatment

(agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents)

IT Metals, miscellaneous

RL: MSC (Miscellaneous)

(agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents)

(agents containing nonionic surfactants for degreasing-and-chemical conversion and metals treated by the agents)

IT Polyoxyalkylenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(agents containing nonionic surfactants for degreasing-and-chemical conversion  
and metals treated by the agents)

IT Silicates, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(agents containing nonionic surfactants for degreasing-and-chemical conversion  
and metals treated by the agents)

IT Anodization  
(agents containing nonionic surfactants for simultaneous  
degreasing-and-chemical conversion and metals treated by the agents)

IT Group VIA element compounds  
RL: CAT (Catalyst use); USES (Uses)  
(dithionites, accelerator; agents containing nonionic surfactants for  
degreasing-and-chemical conversion and metals treated by the agents)

IT Polyoxyalkylenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ethers; agents containing nonionic surfactants for degreasing-and-chemical conversion  
and metals treated by the agents)

IT Alkaline earth metals  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ions; agents containing nonionic surfactants for degreasing-and-chemical conversion  
and metals treated by the agents)

IT Surfactants  
(nonionic; agents containing nonionic surfactants for simultaneous  
degreasing-and-chemical conversion and metals treated by the agents)

IT Galvanized steel  
RL: MSC (Miscellaneous)  
(panels; agents containing nonionic surfactants for degreasing-and-chemical conversion  
and metals treated by the agents)

IT 50-81-7, Ascorbic acid, uses 77-92-9, Citric acid, uses 87-69-4,  
Tartaric acid, uses 110-15-6, Succinic acid, uses 141-82-2, Malonic acid, uses 2338-05-8, Iron citrate 10039-54-0, Hydroxylamine sulfate 14265-45-3, Sulfite 14797-65-0, Nitrite ion, uses 14874-70-5 15092-8 1-6, Persulfate ion 17084-08-1, Hexafluorosilicate  
RL: CAT (Catalyst use); USES (Uses)  
(accelerator; agents containing nonionic surfactants for  
degreasing-and-chemical conversion and metals treated by the agents)

IT 7631-86-9, Silica, uses 14127-69-6, uses 20074-52-6, Iron(3+), uses 22541-53-3, uses 23713-49-7, Zinc ion, uses 25322-68-3D, Polyethylene glycol, alkyl ethers  
RL: TEM (Technical or engineered material use); USES (Uses)  
(agents containing nonionic surfactants for degreasing-and-chemical conversion  
and metals treated by the agents)

IT 7439-95-4, Magnesium, uses 7440-32-6, Titanium, uses 7440-50-8,  
Copper, uses 7440-58-6, Hafnium, uses 7440-67-7, Zirconium, uses 7440-70-2, Calcium, uses 7440-74-6, Indium, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ion; agents containing nonionic surfactants for degreasing-and-chemical conversion  
and metals treated by the agents)

IT 7429-90-5, Aluminum, miscellaneous 39462-15-2, SPCC-SD, miscellaneous  
RL: MSC (Miscellaneous)  
(panels; agents containing nonionic surfactants for degreasing-and-chemical conversion  
and metals treated by the agents)

RN 50-81-7  
RN 77-92-9  
RN 87-69-4  
RN 110-15-6  
RN 141-82-2  
RN 2338-05-8

RN 10039-54-0  
RN 14265-45-3  
RN 14797-65-0  
RN 14874-70-5  
RN 15092-81-6  
RN 17084-08-1  
RN 7631-86-9  
RN 14127-69-6  
RN 20074-52-6  
RN 22541-53-3  
RN 23713-49-7  
RN 25322-68-3D  
RN 7439-95-4  
RN 7440-32-6  
RN 7440-50-8  
RN 7440-58-6  
RN 7440-67-7  
RN 7440-70-2  
RN 7440-74-6  
RN 7429-90-5  
RN 39462-15-2

L4 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN  
AN 2004-548766 [53] WPIX

DNC C2004-201464

TI Degreasing and formation-treatment agent for surface-treatment metal, contains preset amount of solid content and nonionic surfactant having preset hydrophilic lipophilic balance value.

DC M12

PA (NIPPA) NIPPON PAINT CO LTD

CYC 1

PI JP 2004218071 A 20040805 (200453)\* 15 C23C022-34 <--

ADT JP 2004218071 A JP 2003-403689 20031202

PRAI JP 2002-372771 20021224

IC ICM C23C022-34

ICS C23G001-02; C25D013-02

AB JP2004218071 A UPAB: 20040818

NOVELTY - Degreasing and formation-treatment agent contains zirconium, titanium and/or hafnium, fluorine, and a nonionic surfactant. The nonionic surfactant has hydrophilic lipophilic balance value of 9-17. The degreasing and formation-treatment agent contains solid content of 20 - 300 000 ppm.

DETAILED DESCRIPTION - The degreasing and formation-treatment agent further contains an adhesion providing agent chosen from metal ion (A) chosen from zinc, manganese and cobalt, an alkaline-earth metal ion (B), III group metal-ion (C), copper-ion (D) and silicon containing compound. An INDEPENDENT CLAIM is included for surface-treatment metal.

USE - For surface-treatment metal (claimed).

ADVANTAGE - The degreasing and formation-treatment agent favorably performs degreasing and formation-treatment without performing surface control process, and has excellent workability and economical efficiency. The agent provides chemical film with excellent stability and coating-film adhesion.

Dwg. 0/0

FS CPI

FA AB

MC CPI: M12-B01

L4 ANSWER 3 OF 3 JAPIO (C) 2005 JPO on STN

AN 2004-218071 JAPIO

TI DEGREASING AND CHEMICAL CONVERSION COATING AGENT, AND SURFACE-TREATED METAL

IN MATSUKAWA MASAHIKO; CHIHARA YASUSHI; MAKINO KAZUHIRO

PA NIPPON PAINT CO LTD  
PI JP 2004218071 A 20040805 Heisei  
AI JP 2003-403689 (JP2003403689 Heisei) 20031202  
PRAI JP 2002-372771 20021224  
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2004  
IC ICM C23C022-34  
ICS C23G001-02; C25D013-02  
AB PROBLEM TO BE SOLVED: To provide a degreasing and chemical conversion coating agent capable of depositing a chemical conversion film of excellent stability and coating adhesivity without requiring any surface adjustment step.  
SOLUTION: The degreasing and chemical conversion coating agent consists of at least one kind selected from the group consisting of zirconium, titanium and hafnium, fluorine, and nonionic surfactant. The nonionic surfactant has the HLB value of 9-17, and contains solids of 20-300,000 ppm.  
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